



# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

Maine Field Office – Ecological Services  
17 Godfrey Drive, Suite 2  
Orono, ME 04473-3702  
(207) 866-3344 Fax: (207) 866-3351

In Reply Refer To: 53411-2009-SL-0374  
FWS/Region5/ES/MEFO

November 17, 2009

Sean Casto  
Normandeau Associates, Inc.  
80 Leighton Road, Suite C  
Falmouth, ME 04105

Dear Mr. Casto:

Thank you for your letter dated July 14, 2009 requesting information or recommendations from the U.S. Fish and Wildlife Service (Service) concerning a proposed wind project located at Bowers Mountain, Carroll Plantation, Maine. We recommend that you consult the Service's interim guidance on wind energy development at <http://www.fws.gov/habitatconservation/wind.pdf>. We used the Service's interim guidance as a model for developing *Guidelines for Building and Operating Wind Energy Facilities in Maine Compatible with Federal Fish and Wildlife Regulations*, which are attached to this letter. We stepped down the national interim guidance to make the guidance more relevant for Maine wind energy developers. We provide these guidelines so you can make an informed decision regarding site selection, project design, and address the requirements of federal fish and wildlife legislation.

We provide the following information concerning species protected under the Endangered Species Act, Bald and Golden Eagle Protection Act, and Migratory Bird Treaty Act for the project area that you are considering:

### **Endangered Species Act (ESA)**

Under Section 7 of the ESA federal agencies that permit or fund wind energy projects must determine if a project may affect federally listed species. If the federal agency determines that a project has "no effect" on a listed species or their critical habitat, they do not need to seek the concurrence of the Service. If the federal agency determines that a project is "not likely to adversely affect" a listed species, the agency must explain the basis for their determination and seek the written concurrence of the Service. Projects that have an "adverse effect" on a listed species require formal Section 7 consultation with the Service.

Unauthorized take of federally-listed species is prohibited under Section 9 of the ESA. If take of a listed species is anticipated, wind developers are encouraged to contact the Service to discuss



obtaining an incidental take permit under Section 10 of the ESA, which involves developing a Habitat Conservation Plan.

### **Atlantic salmon**

The proposed wind project occurs within the range of the federally endangered Gulf of Maine Distinct Population Segment (GOM DPS) of Atlantic salmon (*Salmo salar*) in Maine (74 FR 29344; June 19, 2009). The Atlantic salmon GOM DPS encompasses all naturally spawned and conservation hatchery populations of anadromous Atlantic salmon whose freshwater range occurs in the watersheds from the Androscoggin River northward along the Maine coast to the Dennys River and wherever these fish occur in the estuarine and marine environment. Included in the GOM DPS are all associated conservation hatchery populations. The proposed project site is on the boundary of the DPS and the critical habitat (see attached maps) for Atlantic salmon (74 FR 29300; June 19, 2009). Federal agencies permitting or funding your project should consult with the Service according to Section 7 of the ESA.

Construction associated with wind power projects may cause adverse effects to the federally-endangered Atlantic salmon if there are stream crossings or sedimentation caused from access roads or transmission lines in salmon habitat. We ask that you document any stream crossings and share this information with the Service and federal permitting or funding agencies (Army Corps of Engineers, or others) who are required to consult with the Service according to Section 7 of the ESA. We encourage project designs that will avoid and minimize adverse effects on salmon and their habitat.

### **Canada lynx**

The federally-threatened Canada lynx (*Lynx canadensis*) occurs throughout northern Maine and could occur in your project area. The proposed project site is not within the area designated as critical habitat for the Canada lynx (74 FR 8616; February 25, 2009), but lynx may occur on or near your project area. Federal agencies permitting or funding your project should consult with the Service according to Section 7 of the ESA.

Canada lynx in Maine prefer to use regenerating spruce-fir habitats having high stem densities. These regenerating stands support high populations of snowshoe hare (*Lepus americanus*), the primary food of the Canada lynx. Highest hare densities are generally present about 12 to 30 years after clearcutting or heavy partial harvesting. Forest practices that diminish habitat quality for snowshoe hares may have an adverse affect on Canada lynx. We have developed *Canada lynx habitat management guidelines for Maine*. Please email ([mark\\_mccollough@fws.gov](mailto:mark_mccollough@fws.gov)) or call (207 866-3344 x115) if you are interested in obtaining a copy.

Wind power construction activities may cause adverse effects to the Canada lynx depending on the size and scale of habitat alteration a project may cause. Evaluations of boreal (spruce-fir) habitat and/or snow tracking surveys in the vicinity of proposed towers, roads, transmission lines, and other associated facilities would help assess the potential for the occurrence of lynx. Maine Inland Fisheries and Wildlife (MDIFW) conducted lynx snow track surveys in northern and western Maine in recent years. You should contact Jennifer Vashon, MDIFW lynx biologist

(650 State Street, Bangor, ME 04401) to determine if surveys were conducted in your project area or nearby townships. Ultimately, this information will be needed by federal agencies permitting or funding your project to determine if adverse effects to lynx or critical habitat are anticipated. We ask that you share this information with the Service and federal permitting or funding agencies (Army Corps of Engineers or others) who are required to consult with the Service according to Section 7 of the ESA. We encourage project designs that will avoid and minimize adverse effects to lynx and their habitat.

### **Bald and golden eagles**

Migratory bald eagle (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) may occur in your project area. No bald eagle nests occur near your project area, but survey information is incomplete. If wind power interests are pursued at this site, surveys should be conducted in appropriate habitats at other sites within four miles of the proposed turbine locations. Known bald eagle nests occur at Junior and Scraggly Lakes, but are >5 miles distant. We do not know if bald eagle nest surveys have been conducted recently in this area. Further information on eagle nests and status may be obtained from Charlie Todd, MDIFW, 650 State St., Bangor, ME 04401.

Wind energy projects can affect bald and golden eagles by degrading or fragmenting habitat, taking birds by collision with rotating turbine blades, or by introducing new sources of disturbance (noise, construction activity, permanent changes to the landscape, barriers to movement, and increased human activity). Furthermore, both bald and golden eagles may be attracted to forest openings around wind turbines to feed, particularly if sources of carrion (large birds killed by collisions) are present. Emerging information suggests that in some situations, wind power may cause significant take and disturbance of eagles. For this reason, we recommend that you document eagle movements (resident and migratory birds) at your project location and locate eagle nests, communal roosts, and communal foraging areas within four miles of your proposed project location. See the attached guidelines for further information.

Although the bald eagle has recovered such that it no longer is protected under the ESA (August 9, 2007), it remains protected from take under the Bald and Golden Eagle Protection Act (BGEPA)(16 U.S.C. 668-668d) and the Migratory Bird Treaty Act (16 U.S.C. 703-712). “Take” under BGEPA means to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb. Disturb means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle; 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior; or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior (72 FR 31332, 2007).

The U.S. Fish and Wildlife Service prepared National Bald Eagle Management Guidelines (<http://www.fws.gov/migratorybirds/CurrentBirdIssues/NationalBaldEagleManagementGuidelines.pdf>) to help landowners, land managers and others meet the intent of BGEPA and avoid disturbing bald eagles. Please note that our National Bald Eagle Guidelines do not provide guidance for large development projects like wind power projects. See our *Guidelines for Building and Operating Wind Energy Facilities in Maine Compatible with Federal Fish and Wildlife Regulations* for additional information.

### **Other protected species and rare natural communities:**

We did not review this project for state-listed plants, natural communities and wildlife. We recommend that you contact the Maine Department of Inland Fisheries and Wildlife for additional information on state-threatened and endangered wildlife and wildlife species of special concern. The Maine Endangered Species Act may protect some of the species in your project area.

Steve Timapano  
Maine Department of Inland Fisheries and Wildlife  
284 State Street  
State House Station 41  
Augusta, ME 04333-0041  
Phone: 207 287-5258

We recommend that you contact the Maine Natural Areas Program for additional information on state-threatened and endangered plant species, plant species of special concern, and rare natural communities.

Lisa St. Hilaire  
Maine Natural Areas Program  
Department of Conservation  
93 State House Station  
Augusta, ME 04333  
Phone: 207 287-8046

### **Migratory Bird and Bat Concerns**

Wind energy projects can adversely affect birds and bats and their habitats. Foremost, the potential exists for bird and bat collision within the rotor-swept area of each turbine. The potential for collision with resident or migratory species of birds and bats is affected by many factors but location of the wind turbines seems to be one of the most important. The potential for harm makes careful evaluation of wind facilities essential. Each proposed development site is unique and requires individual evaluation. The Service's guidance on wind energy development should be consulted (<http://www.fws.gov/habitatconservation/wind.pdf>). Please see our *Guidelines for Building and Operating Wind Energy Facilities in Maine Compatible with Federal Fish and Wildlife Regulations* for additional guidance.

### **Wetlands**

Your project may require bridging, filling, or degrading certain wetlands or other waters of the United States under jurisdiction of section 404 of the Clean Water Act, which may require permits be acquired from the U.S. Army Corps of Engineers. The Service may provide

recommendations to the Army Corps to avoid and minimize effects to fish and wildlife in issuing Clean Water Act permits.

In summary, to ensure that appropriate areas are selected for wind power development and that these facilities are developed in the most environmentally sound manner we recommend that you follow *Guidelines for Building and Operating Wind Energy Facilities in Maine Compatible with Federal Fish and Wildlife Regulations* and the Service's *Interim Guidance on Avoiding and Minimizing Wildlife Impacts from Wind Turbines* (<http://www.fws.gov/habitatconservation/wind.pdf>)

If you have any questions, please call Mark McCollough (Canada lynx and bald eagles) at (207) 866-3344 x115 or Wende Mahaney (wetlands and Atlantic salmon) at (207) 866-3344 x118.

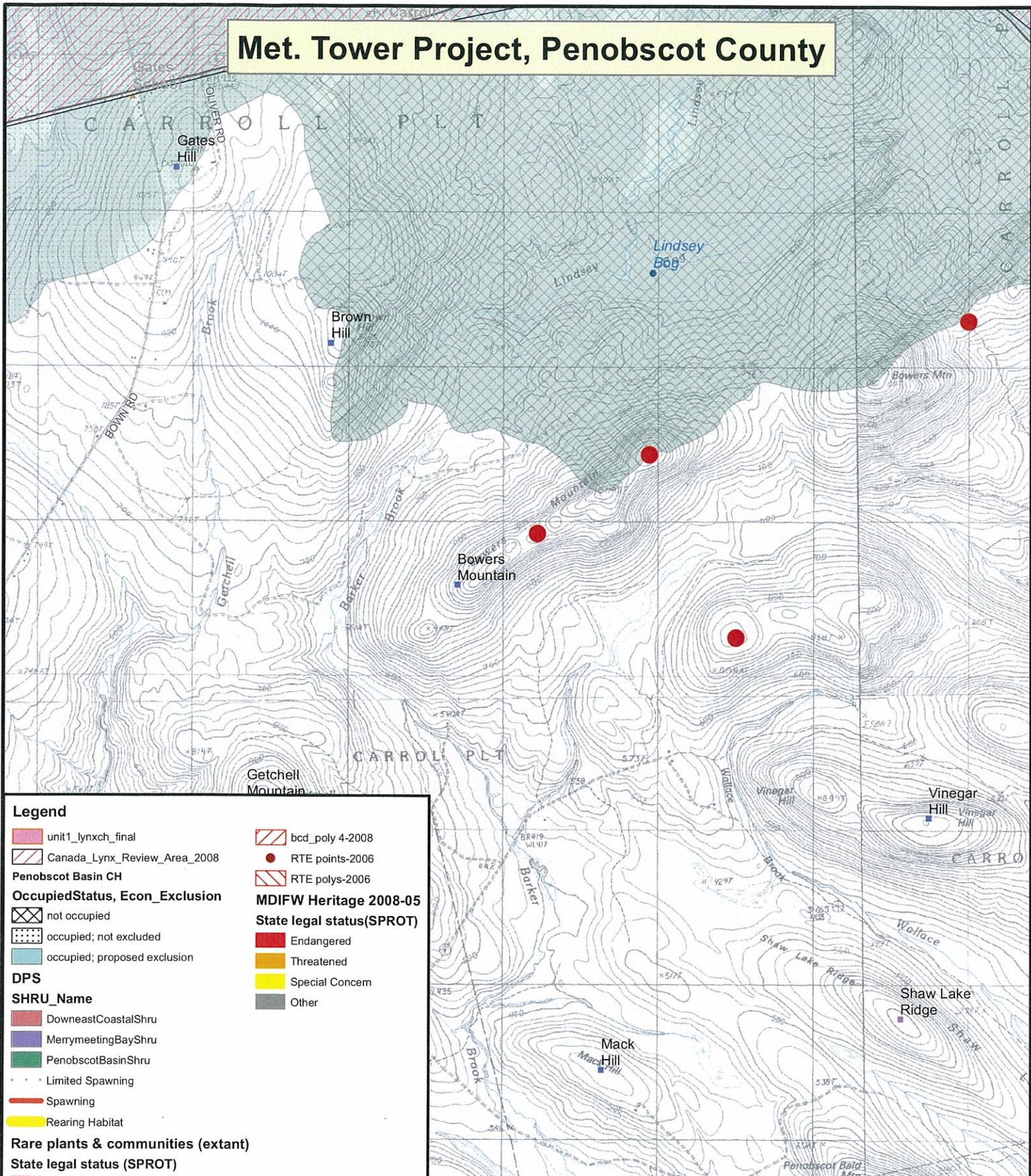
Sincerely,

A handwritten signature in blue ink, appearing to read "Erin Williams".

Erin Williams for  
Lori H. Nordstrom, Project Leader  
Maine Field Office

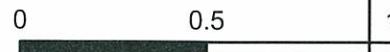
cc: Steve Timpano, MDIFW – Augusta, ME  
Charlie Todd, MDIFW – Bangor, ME  
Jay Clement, ACOE – Manchester, ME

# Met. Tower Project, Penobscot County



## Legend

- unit1\_lynch\_final
- Canada\_Lynx\_Review\_Area\_2008
- Penobscot Basin CH**
- OccupiedStatus, Econ\_Exclusion**
- not occupied
- occupied; not excluded
- occupied; proposed exclusion
- DPS**
- SHRU\_Name**
- DowneastCoastalShru
- MerrymeetingBayShru
- PenobscotBasinShru
- Limited Spawning
- Spawning
- Rearing Habitat
- Rare plants & communities (extant)**
- State legal status (SPROT)**
- Possibly Extirpated
- Endangered
- Threatened
- Special Concern
- other
- Roseate Tern Essential Habitat 4-2008
- Eagle nests 10-2007
- Bald Eagle Essential Habitat 3/06
- bcd\_poly 4-2008
- RTE points-2006
- RTE polys-2006
- MDIFW Heritage 2008-05**
- State legal status (SPROT)**
- Endangered
- Threatened
- Special Concern
- Other



Data from USFWS, MDIFW & MNAP.